

CA20N
NRC800
-1989
N051

PUBLIC WORKS in the NIAGARA REGION

by
Lionel D. Feldman Consulting Ltd.

Niagara Region
Review Commission



Presented to the
LIBRARY *of the*
UNIVERSITY OF TORONTO

by

J. STEFAN DUPRE

NIAGARA REGION REVIEW COMMISSION

BACKGROUND STUDY

PUBLIC WORKS IN THE NIAGARA REGION

by

Lionel D. Feldman Consulting Ltd.

October 1988


This background study has been prepared for the Niagara Region Review Commission to assist it in its deliberations. All recommendations, conclusions or comments in this study are strictly those of the authors of the study and do not reflect the views of the Commission.

A publication of the:

Niagara Region Review Commission
4572 Queen Street
Niagara Falls, Ontario L2E 2L6
1-800-263-8800
416-354-5601

Harry Kitchen,
Chairman

David Siegel,
Research Director



Digitized by the Internet Archive
in 2022 with funding from
University of Toronto

<https://archive.org/details/31761115471872>



TABLE OF CONTENTS

<u>Title</u>	<u>Page</u>
List of Tables	i
Executive Summary	ii
1. INTRODUCTION	1
2. PUBLIC WORKS FUNCTIONS AND INVENTORY OF RESPONSIBILITY	5
Introduction	5
I Transportation	6
II Water	15
III Sanitary Sewage System	18
IV Storm Drainage	21
V Waste Management	22
VI Emergency Planning	23
VII Mapping, Data Bases	23
3. PUBLIC WORKS AND REGIONAL INTERGOVERNMENTAL RELATIONS	27
Introduction	27
I Expenditures and Public Works	28
II The Region and the Hydro-Electric Commissions	31
III Analysis of An Approach to Inter- jurisdictional Conflict Resolution	32
4. CRITERIA FOR THE ALLOCATION OF RESPONSIBILITIES	35
5. CONCLUSIONS AND RECOMMENDATIONS	37

Appendices

	<u>Page</u>
A Terms of Reference (Revised)	47
B List of Interviews	50
C Interview Form - Appointed Officials	54

LIST OF TABLES

		<u>Page</u>
Table 1	Niagara Region: Public Works Real Expenditure Per Household by Function	29
Table 2	Niagara Region: Public Works and Social Services	30

EXECUTIVE SUMMARY

This study of public works in the Niagara Region was commissioned by the Niagara Region Review Commission to determine whether there was duplication in the provision of public works functions arising out of the overlapping jurisdiction of the Regional Municipality and the twelve area municipalities in Niagara.

In essence an inventory of all the public works functions was conducted through extensive interviews and review of documentation to determine which level of municipal government in the Region was responsible for each of the seven main functions and forty-seven sub-functions. For comparison purposes the regions of Durham, Halton and Peel were examined.

Subsequently after reviewing expenditure patterns in the region over the decade 1977-1986 it was found that the public works department had responded well to changing priorities over this period. When two examples of interjurisdictional relations were examined it was concluded that the regional public works department displayed an attitude and approach that showed elements of rigidity. As a consequence of analysis of material in this study two major conclusions were arrived at, these are:

- I There is no serious problem resulting from either the duplication, where it does exist, in the provision of public works functions in Niagara; or from the existence of the split jurisdiction/shared responsibilities that arises from the structure of municipal government in Niagara.
- II The problems that do exist as a consequence of the shared responsibilities are effectively at the margin. Some of them, nevertheless, are important and call for readjustment and fine-tuning of a municipal system that both works well, and is cost effective in the provision of services to the constituents of the region.

Sixteen recommendations have been made to deal with problems identified in each of the seven main public works functions which are the subject of this Study. These recommendations are:

Transportation

1. The Regional role in providing the "secondary tier", of road network should not be reduced. It should, however, be adjusted, utilizing planning techniques defining accessibility, road function and classification. The likely result is that some roads that have no "regional

function" will be transferred to area municipalities and other will assume "regional status". In essence a deregionalization of some roads in the Region will result, in these cases the committee mechanism recommended below will determine questions of costs and who bears what portion, if any.

2. This determination must be done through consultation with area municipalities and is not a decision to be unilaterally taken. A consideration might be give to an expanded Regional mandate in the future to provide "comprehensive transportation service" through planning, "coordination and cooperation with local, provincial and federal governments and agencies" and through "implementation of services and facilities necessary to provide a comprehensive transportation system of carrying people and good by all modes".
3. In consultation with affected area municipalities a differentiated system of service levels urban and rural for: maintenance - grass cutting, snow removal, be adopted.

Water

1. The existing split jurisdiction for the provision of water be retained.
2. The Region, after discussion with area municipalities, might wish to redefine where regional jurisdiction may be altered.
3. Region to consider budgeting of capital expenditures for contingencies.

Sanitary Sewers

1. The existing split jurisdiction for the provision of sanitary sewers be retained.
2. The Region, after discussion with area municipalities, might wish to redefine its jurisdiction over sewer mains especially as related to sewage and storm flows.
3. Ministry of Environment, the Regional Municipality and area municipalities begin to study and establish a joint approach to dealing with combined sewers and property drains connections to sanitary sewers including how it would be financed.
4. The Region consider budgeting of capital expenditures for contingencies.

Storm Drainage

1. The Regional Municipality, Ministries of Natural Resources, Environment and the area municipalities jointly address the questions of jurisdiction, exercise of authority and control of water courses and run-off areas.
2. The Regional Municipality, in consultation with the area municipalities, review current policies on storm drainage especially on Regional right of ways.

Waste Management

1. The Regional Municipality of Niagara assume responsibility for all landfill sites and disposal facilities, including any transfer station. CLUB arrangements to be phased out as soon as practicable.
2. Collection be a responsibility of the area municipality.

Emergency Planning

The Regional Municipality of Niagara continue to perform a coordinating role with respect to emergency planning as well, in concert with area municipalities develop and establish a training capability. The region's emergency planning office should be the central depository for information, which should be distributed throughout Niagara from this office.

Mapping and Data Bases

The Regional Municipality of Niagara coordinate development of data bases and mapping for the whole Region and should become central depository of data.

Finally, it is deemed essential that a mechanism be established at the administrative or technical level with Niagara both to formalize and to provide a forum to resolve these interjurisdictional difficulties.

Therefore it is Recommended that:

1. A joint Regional Municipality of Niagara, Area Municipality, Consultative Committee be established with representatives from the Region's Public Works Department and from each area municipality works department. If specific issues arise which relate to boards or commissions in the region eg. Niagara Parkway Commission, Hydro-Electric Commissions etc., then representatives from these bodies be added to the Committee for the determination of the specific issues.

2. This Joint Municipal Technical Consultative Committee for the Niagara Region meet at least twice a year, more frequently if required. The Joint Consultative Committee should so structure itself that minutes are taken and circulated.
3. The mandate of the Joint Municipal Technical Consultative Committee fro the Niagara Region shall be to deal on an intermunicipal basis with issues arising out of the division of the public works functions in Niagara.

1. INTRODUCTION

This study of the provision of public works services in the Niagara region has a very explicit focus. The Terms of Reference (Revised), which are reproduced at page ii, are clear. The Niagara Region Review Commission determined that there was "concern and dissatisfaction" both on the part of citizens-at-large as well as "local government officials" who "perceived" that there was duplication in the provision of public works in the region. Following from this statement and identification of "the problem", by the Commission the terms of reference, amongst other things, require that the Study:

examine and describe the extent to which the duplication in the provision of public works actually exists.

The a priori assumption, therefore, is both that duplication exists in the provision of public works, and that it likely results from the overlapping jurisdiction of the Regional Municipality and the twelve area municipalities in these services.

The task before the Study then, is first, to document "the extent" of such "duplication", if any, and then to recommend changes that would improve "efficiency and effectiveness" in public works service delivery. The conduct of this Study is orthodox and consistent with the terms of reference.

The Study has proceeded on a two track system. First, it was required and critical that an accurate, detailed documentation of which level of municipal government, - regional or area, - was responsible for the provision of each function be conducted. The identification of areas of actual duplication, if any, are noted with comment. There are six main public works service areas or functions to be probed (roads, water, sanitary sewage, storm drainage, waste management and emergency planning) and forty-seven sub functions.

In the development of the interview format for the appointed officials the scope of the study was adjusted by a shift in emphasis. The roads component identified in the Terms of Reference was changed to transportation and added to the section was mapping and data base. The rationale for the change from "roads" to "transportation" is because "roads" are only a part of the Region's transportation system. Niagara's economic and population growth depends on an efficient transportation system that moves people and goods by all modes and on the interaction between those modes. Roads are an important part of the transportation system. In

goods movement, for example and especially within urban areas and on short hauls, the role of roads is increasing with the decline of railways. Railways are having problems competing with bus and air for passenger services. The interview form was expanded somewhat to see to what extent the Region and the area municipalities are addressing the transportation system within the Region rather than dealing with the roads network only.

The mapping and data base service was added because computer technology provides an important management and planning tool for maintenance operations and capital expenditures.

After this fact finding was completed, and only then, could real, as opposed to "perceived", problems be identified and solutions recommended.

This Firm decided after discussion and agreement with the Commission that due to the technical aspects of the detailed fact finding that this portion of the Study be conducted by a Consulting Engineer, who would be responsible to this Firm. The Consulting Engineer selected was to be knowledgeable about Niagara in particular and Regional Municipalities in general, but should not be currently directly involved with work in the Niagara Region.

The firm of W. Strok & Associates Limited was engaged to perform this detailed and technical fact-finding. Moreover, Mr. W. Strok, the President of W. Strok & Associates Limited undertook the work personally. Mr. Strok's experience, wisdom, solid judgement and adherence to detail have proven to be invaluable; and the Study has benefited immeasurably from his insight and advice.

The Work Plan of the Terms of Reference called for a total of twenty-nine interviews to be conducted both within the boundaries of the Region and beyond. A total of forty-one interviews actually were completed. Appendix A provides a list of: who was interviewed, their position and jurisdiction, and the date of the interview. On average, each interview was of forty-five minutes duration.

The interviews with appointed officials covered four distinct groups of people as follows:

- (i) officials who deal routinely and in policy terms with the regional and area municipalities in Niagara from the Provincial Ministries of Environment and Transportation;
- (ii) heads of the Public Works Departments in the Regional Municipalities of Durham, Halton and Peel;

- (iii) the Director of Engineering and Heads of sections of the Public Works Department of the Regional Municipality of Niagara; and
- (iv) Directors, City Engineers and Works Superintendents of the area municipalities within Niagara.

Appendix B is the interview form which is an outline format rather than a structured questionnaire. The form was designed to elicit the following four main points:

- a. Jurisdiction for the function was established.
- b. Any conflicts and how conflicts could be resolved.
- c. Positions, if any, of all levels of government on issues.
- d. Focus, to what extent the Regional Municipality and Area Municipalities address these issues and if there is an identifiable need to address them.

Not all questions necessarily were asked during each interview as discussions were limited to the expertise and/or jurisdiction of the interviewee.

The primary focus of the interviews was: to identify conflicts, problem areas and duplication of service under current division of jurisdiction (or split jurisdiction) and within "gray" areas of current jurisdiction; to solicit opinions as to how each of the interviewee's considered these could be resolved. The resolution could occur for example, by changing or redefining jurisdiction. The question of which of the current arrangements are satisfactory also was raised.

A similar, but necessarily less detailed interview format was used for elected officials.

In addition to these interviews, the following material has been reviewed:

- newspaper clippings,
 - correspondence to the Commission from concerned citizens, and
 - internal memoranda, and submissions to the Commission by the Region's Public Works Department. Area Municipalities and Hydro-Electric Commissions.
- Included have been copies of procedures, policies, and research papers.

All the interviews were confidential, therefore in this Study no attribution is provided for any quotation used or cited.

The documentation made available has been extensive and extremely useful in offering insight into the Public Works operations in Niagara.

The progress meeting was held September 21, 1988 at which time the major findings of the Study were presented to the Chairman and Research Director and conclusions and recommendations were detailed.

This Study has been structured as follows with four chapters in addition to this Introduction. The results of the interviews are documented in what is essentially an inventory of responsibility for the various public works functions in Niagara. Chapter 3 examines the role of the Public Works Department within the governmental structure of the region and how it interacts with area municipalities to attempt to illustrate a corporate management style and how that impacts on service delivery. A subsequent chapter deals with the requirements that an approach to the question of how to allocate responsibilities as between level of municipal government be outlined. The final Chapter presents the Study conclusions and recommendations.

2. PUBLIC WORKS FUNCTIONS AN INVENTORY OF RESPONSIBILITY

As the Introduction makes clear there is a major fact finding component of this Study of Public Works in the Niagara Region. It requires a documentation of which level of municipal government - the regional municipality or area municipality - is responsible for which function.

Each of the seven major public works functions, namely:

- Transportation,
- Water,
- Sanitary Sewers,
- Storm Drainage,
- Waste Management,
- Emergency Planning, and
- Mapping Data Base;

and the forty-seven identified public works sub-functions have been dealt with in the same manner. Initially, the level of municipal government responsible is identified; a synthesis of comments obtained during the interviews is recorded; what pertains in the three other comparable regions (Durham, Halton and Peel) is described, and finally, opinions about the service are given.

What has been done in this chapter is to record, with a minimum of editorial comment, the detailed information obtained from interviews and the review of documentation. Subsequent chapters contain an analysis of this information and this Firm's recommendations and conclusions for consideration by the Chairman of the Niagara Region Review Commission.

While not wishing to belabour the point a very short discussion of process is in order. This Study represents this Firm's identification and analysis of the public works functions in the region with recommendations consistent with the terms of reference. The task of the Study is to report to the Chairman. It is he who has the responsibility for the Commission's recommendations. The Chairman is not obligated to accept the conclusions or findings of this Study.

This Study is the necessary first step in the Report Recommendation process. Notwithstanding this diversion into a discussion of the process of the Commission one is

mindful, that as always, it is the bearer of the news, (the messenger), in this case this Study, that will be blamed rather than the arbiter, the Chairman.

At the end of this chapter a summary is offered which highlights those functions where duplication has been identified or other problems have emerged.

I TRANSPORTATION

A. ROADS

1. SIDEWALKS

Under area municipality jurisdiction on Regional roads, the Region* is responsible for sidewalks on structures ie. bridges.

Comments:

- Public has some problem in identifying who is responsible;
- Some problems with Regional approval of non-standard location of sidewalks; and
- On rural road cross-sections at times there, is not adequate right-of-way to accommodate sidewalks.

Other Regions:

Under area municipality jurisdiction similar problems occurring as in the Region of Niagara.

Opinions:

Opinions vary from "current arrangements satisfactory" to "should be under jurisdiction of authority responsible for the road".

2. LIGHTING

Under area municipality jurisdiction on Regional roads. Occasionally Region may install lighting at intersections when Ontario Ministry of Transportation warrants are satisfied.

Comments:

- generally no problems,
- some problems with standards, level of lighting.

* "Region" is used as shorthand for Regional Municipality of Niagara.

Other Regions:

Durham and Halton: The same policies as in Niagara

- Peel: - Region pays for capital cost when road is reconstructed or on new roads. Peel is considering assumption of the costs of retrofit.
- Some problems with area municipalities in terms of standards and location.

Opinions:

Most consider current arrangements are satisfactory. Some feel that lighting should be under jurisdiction of the authority responsible for the road.

3. TRAFFIC SIGNALS

Under Region's jurisdiction on Regional roads. MTO responsible for signals at intersections with Provincial Highways.

Region maintains all area government traffic signals on "charge back basis".

Comments:

All area municipalities are satisfied with current arrangements and with Region's performance.

Other Regions:

- Durham: Responsible for traffic signals on Regional Roads. Some maintenance work done for area municipalities.
- Halton: Responsible for traffic signals on Regional Roads. Area municipalities (Oakville) maintains traffic signals on a "charge back basis".
- Peel: Responsible for traffic signals on Regional Roads. Maintenance contracted out.

Opinion:

General satisfaction with current arrangements.

4. PAVEMENT MARKINGS

Preamble

"Pavement markings" are painted lines on paved roads which designate lanes, no passing zones,

left and right turn lanes, stop bars and crosswalk lines.

Current Policy

Under Regional jurisdiction on Regional Roads.

Comments:

No comments.

Other Regions:

Same as in Niagara.

Opinions:

Generally satisfied, but earlier painting in the spring would be desirable.

5. SIGNING - TRAFFIC

Preamble

"Traffic signs" are signs erected normally on the road side and consist of warning signs (curve, bump, stop ahead, etc.) and regulatory signs (stop, speed limit, parking, etc.).

Current Policy

Under Regional jurisdiction on Regional Roads.

Region produces signs in Regional sign shop for all area municipalities.

Comments:

- Generally satisfied.
- Most area municipalities were complimentary about the convenience, efficiency and cooperation of Regional Sign Shop.

Other Regions:

Under Region's jurisdiction.

Opinions:

Current procedures satisfactory.

6. SIGNING - DIRECTIONAL

Preamble

"Directional signs" are signs which inform drivers of destinations, routes, distances, street names, etc. Directional signs generally help drivers to find where they are and assist them in following routes to their destinations.

The same as for "Signing - Traffic" except:

Opinions:

Some expressed an opinion that directional signing on Regional Roads should be improved.

7. SIGNING - INFORMATION

Preamble

"Information Signs" inform motorists of location of parks, services (restaurants, gas, accommodation), hospitals, airports, service clubs, municipal boundaries, river names, etc.

Current Policy

Under Regional jurisdiction on Regional Roads.

Comments:

- some flexibility desirable,
- improve tourist signing.

Other Regions:

Under Regional jurisdiction generally area municipalities initiate requests - regions approve.

Opinions:

General satisfaction.

8. COMMERCIAL SIGNING

Generally erected under area municipality by-law. Subject to Regional approval up to 20m of centerline of road.

Comments:

- may require up to four permits,
- some public confusion,
- service club signing - not clear who is responsible for ensuring proper maintenance.

Other Regions:

Similar arrangements as in the Region of Niagara.

Opinions:

- generally no problems,
- some indicated a need for clearer "authority"
- suggestion made that one permit should be required with issuing office obtaining all necessary approvals.

9. LANDSCAPING

Generally Region does not provide landscaping. In some instances Region has shared the cost of landscaping.

Region provides seeding and sodding.

Comments:

- no variation between urban and rural,
- frustrating approval process when area municipality wants to provide landscaping,
- inadequate maintenance (grass cutting) in urban areas,
- some local municipalities provide maintenance (grass cutting, collection of trash) at their cost, and
- recent policy of sodding ditches by Region is commendable.

Other Regions:

All Regions provide landscaping on reconstructions and new construction projects on urban roads mainly in the form of tree planting.

At some locations, the Regions of Halton and Peel have provided extensive landscaping designed by landscape architects.

Opinions:

- more flexibility,
- differentiation between urban and rural, and
- better maintenance along urban roads.

10. ACCESS CONTROL

a. Regional Roads:

All Regional Roads designated as "access control" by Region.

Comments:

Generally no problems.

Other Regions:

All Regions control access on Regional Roads.

b. Local

Preamble

Intersections are critical points on arterial roads (Regional Roads) in terms

of efficiency, capacity and safety of arterial roads operation. In order to protect and improve traffic conditions at intersections, access control on all approaches is desirable.

Current Policy:

Region has some control on area municipal road approaches to Regional roads, but does not use its authority.

Comments:

No specific comments.

Other Regions:

Similar to the Region of Niagara.

11. PLANNING

Planning of Regional Roads is a Regional responsibility.

Comments:

- better planning is needed,
- "no planning" currently done, and
- when planning area municipalities and MTO should be included in the process.

Other Regions:

- Durham: - Similar to Region of Niagara mainly based on "Road Needs" studies.
- Halton: - "Road Needs" studies,
- Region has few "urban" roads and urban roads require more extensive long term planning,
- Peel: - Director of Transportation in the Regional Planning Department carries out, in cooperation with area municipalities and MTO, long term projections and computer modeling,
- "Road Needs" studies.

Opinions:

- planning of roads is needed,
- most important regional function is planning and coordination.

12. TRAFFIC ENGINEERING

a. Parking Control

Subject to Regional control and approval.

Area municipalities enforce "on street" parking and collect revenues (parking meters).

Comments:

- some problems with definition of jurisdiction,
- generally works well.

Other Regions:

Similar to Region of Niagara.

b. Traffic Signal Coordination

Region maintains and coordinates all traffic signals within Region except MTO traffic signals.

Comments:

General satisfaction with operation of traffic signals.

Other Regions:

Durham - Regional control.

Halton - area municipal control (Oakville) on "charge back" basis,

- Peel - joint computer control with area municipalities,
- system control mainly local,
 - Region shares in costs, and
 - close liaison maintained.

Opinions:

Technically sound and well run system.

13. CLASSIFICATION

Preamble

Roads can be classified according to traffic volumes, composition of traffic and function.

Current Policy:

No classification.

Comments:

- general consensus that roads should be classified,
- expenditures and maintenance should reflect classification eg. grass should be cut more frequently on regional road running through residential neighborhood than in rural area.

Other Regions:

Durham and Peel - no classification.

Halton - some classification.

14. PARADE PERMITS

Police has authority, but Public Works issues permits:

Region - on regional roads, and
Area Municipality - on local roads.

Comments:

General satisfaction with current procedures.

Other Regions:

Same as Niagara.

15. MAINTENANCE

Preamble

No direct question was asked regarding maintenance. During interviews however, comments regarding maintenance in summer (grass) and winter (snow and ice) were made.

Current Policy:

Uniform maintenance policy is applied on all regional roads.

Winter maintenance - bare pavement,
Grass cutting - three times a year.

Comments:

- winter maintenance on rural regional roads is excessive,
- grass cutting on urban regional roads inadequate, and
- some minor maintenance decisions require a visit and approval of Regional Departmental Staff which causes delays and increases costs. These should be handled at "local" staff level.

Other Regions:

Questions not addressed.

Opinions:

- differentiate maintenance between urban and rural roads,
- use classification to establish maintenance levels,,
- decentralize some maintenance decisions.

B. TRANSIT

Area government responsibility with no Regional involvement.

Comments:

Region should study and identify regional needs, coordinate local transit authority with provincial and private service in providing for these regional needs where justified.

Other Regions:

Durham and Halton - not involved.

Peel - Director of Transportation in the Regional Planning Department is involved in coordination of existing and planning of future transit systems.

Opinions:

Region should coordinate existing regional transit and plan future regional transit whenever the need is well justified.

C. COMMERCIAL (FREIGHT)

Preamble

Transportation of goods and commercial traffic form a significant proportion of the cost of goods consumed locally, within the province or exported. Railways, for all practical purposes, have abandoned goods transportation in urban areas and they concentrate on bulk and high volume flow commodities. Road transport therefore has assumed a dominant regional position in goods flow and its role will increase.

Generally "goods flow" and commercial services are a neglected subject in transportation planning.

Current Practice:

Commercial traffic is not addressed.

Road design provides for truck turning radiuses and road design reflects truck loading.

Comments:

Planning of truck and bus routes needed in order to avoid overloading local roads.

Other Regions:

Do not address commercial traffic.

D. REGIONAL ACCESSIBILITY

Preamble

In order to address and to influence federal, provincial, regional, local and private plans in transportation a factual base is required, necessarily backed by analysis with sufficient

technical sophistication addressing all modes and their inter-relationships.

Current Practice:

Region is involved in meetings with municipalities across the border in U.S. and addresses transportation issues beyond MTO guideline.

Comments:

- neither Region nor local municipalities address regional accessibility or transportation planning in a systematic sophisticated way,
- no problem no need.

Other Regions:

- | | |
|-------------------|--|
| Durham and Halton | - do not address regional accessibility, |
| | - respond to MTO initiatives. |
| Peel | - Director of Transportation in the Regional Planning Department addresses these issues, |
| | - Director of Transportation sits on a number of Provincial and regional committees. |

Opinions:

- most consider that there is a need to address the accessibility and transportation planning,
- most agree that Region should have responsibility for data collection and analysis and coordinate regional and local needs,
- planning, analysis and coordination of transportation is the most important regional role
- not needed.

II WATER

1. SUPPLY AND TREATMENT

Preamble

"Supply" means obtaining water from lakes, rivers and wells and delivery to "treatment plants". "Treatment" means removal from water of impurities (filtration) and elimination of unacceptable to health elements (treatment).

Current Responsibility:

Regional responsibility.

Comments:

- some problems with supply,
- improved planning and coordination needed,
- security of supply,
- adequate pressure and volume for fire protection needed at a number of locations.

Other Regions:
Regional responsibility.

Opinions:
All agree it should remain regional responsibility.

2. RESERVOIRS, WATER TOWERS
Regional responsibility.

Comments:
- some problem with names of area municipalities on water towers.

Other Regions:
Regional responsibility.

Opinions:
- no problems except for names of area municipalities on water towers.

3. MAINS

All mains 16 in (400 mm) or larger Regional responsibility.

Area municipalities maintain and carry out emergency repairs with charge back to the Region.

Comments:
- most consider current arrangements are satisfactory,
- some indicated a problem of municipal service lines connections to 16 in. regional mains except at designated points and would like to see a flexible approach.

Other Regions:
Regional responsibility.

Opinions:
- some areas consider that security of service is inadequate,
- some consider that higher priority should be placed on providing water pressures and volumes adequate for fire protection,
- improved flexibility in providing service to new development,
- improved definition of jurisdiction, eg. Region to be responsible for supply, treatment, reservoirs, water towers, their interconnection and local municipal system connection points. Area municipality to be responsible for the remainder of the system, including all mains,

- better communication with area municipality in emergencies, design of new facilities, dealing with local problems. Advise area municipality of progress of work on new facilities and time when they are going to be operational.

Note:

By any standard the Region has done an excellent job of integrating many small systems into an effective water supply system at economic rates. Now, it may be in a position to devote attention to security of service, fire protection and forward planning.

4,5, and 6 LOCAL MAINS, HOUSE CONNECTIONS AND COMMERCIAL CONNECTIONS

Preamble

"Local mains" are water pipelines distributing water along local streets serving relatively small areas. Hence, commercial and industrial water service are usually connected to "local mains".

Current Responsibility:

Area municipality responsibility.

Comments:

No comments.

Other Regions:

Regional responsibilities.

7. PAYMENT

Region charges municipalities at bulk rates. Area municipalities collect from ratepayers.

Comments:

- general satisfaction with arrangement.

Other Regions:

Regional responsibility including collection of charges. Region of Halton uses local Hydro-Electric Commission to collect charges.

8. STANDARDS

Region establishes standards, including local mains which are subject to Regional approval.

Comments:

- vary from satisfactory to excellent standards.

Other Regions:
Regional responsibility.

9. EMERGENCIES

Region responsible for regional system.

Area municipalities provide emergency service on regional mains with charge back to the Region.

Comments:
General satisfaction with the arrangement.

Other Regions:
Regional responsibility.

10. PLANNING AND RESEARCH

Regional responsibility on regional system, local on local system.

Comments:
- better coordination and liaison,
- more flexibility in implementation.

Other Regions:
Regional responsibility.

III SANITARY SEWAGE SYSTEM

Preamble

Sanitary sewage system" consists of a collection system (residential, commercial and industrial buildings connections) which deliver "sewage" through local mains and mains to "sewage treatment plants" where filtration, solids separation and treatment results in "clean" (depending on level of treatment) water discharged to lakes and rivers and "residue" most of which is in the of "sludge" much of which is used as fertilizer.

1. TREATMENT FACILITIES AND DISCHARGE

Regional responsibility.

Comments:
- problem with combined sewers and leaks,
- problem with property sub-drains connected to sanitary sewer system,
- generally complementary about treatment plants and system rationalization,
- problem with overflows and backing-up into private property. (Quaere: Is area municipality or Region responsible or both?),
- better planning and coordination needed,

- problem with local zoning for regional facilities.

Other Regions:

Regional responsibility.

Opinions:

- generally satisfactory,
- good cooperation.

Note:

Since the Region was established in 1969 substantial progress has been made in integration, rationalization and upgrading of the system. As the system eliminates backlog, more attention will be given to future planning and needs.

2. MAINS

Region responsible for flows of 6 cusees (cubic feet per second) or larger.

Comments:

- some regional mains in poor condition with significant infiltration, however, the Region bills area municipalities for "total flow".

Other Regions:

Regional responsibility.

3,4 and 5 LOCAL MAINS, HOUSE CONNECTIONS, COMMERCIAL CONNECTIONS

Preamble

"Local mains" are sanitary sewer pipelines normally located on local roads serving relatively small areas. Residential, commercial and industrial buildings are usually connected to "local mains".

Current Responsibility:

Area municipality responsibility.

Comments:

- no problems with joint sewers,
- problems with infiltration,
- problems with property sub-drains and roof drains connections.

Other Regions:

Region responsibility.

Opinions:

- no incentive for local municipalities to address the problems of joint sewers, infiltration and property connections.

6. PAYMENT

Region charges area municipalities for bulk volume (per 1000 gal)

Area municipality charges ratepayers.

Comments:

Generally satisfactory.

Other Regions:

Regional responsibility.

7. STANDARDS

Regional standards.

Preamble

"Standards" (federal, provincial and municipal) are used to define quality of materials and method of construction and define "dimensions" of parts to ensure fit and interchangeability of parts between suppliers which results in significant cost savings. Municipalities utilize provincial and federal standards modified and augmented by their own standards.

Comments:

Generally satisfactory.

Other Regions:

Regional standards.

8. EMERGENCIES

Preamble

All "engineered facilities" are subject to malfunction. Serious, malfunction results in emergency requiring special response.

Current Responsibility:

Regional responsibility.

Comments:

- treatment plants and pumping stations - Region,
- mains - area municipality with charge back to the Region,
- local pumping stations - Region.

Other Regions:

Regional responsibility.

9. PLANNING AND RESEARCH

Regional responsibility.

Comments:

- general satisfaction,
- good cooperation,
- improve communication and coordination,
- better attention to small problems.

10. PUMPING STATIONS

- Regional responsibility on regional system,
- Region maintains and deals with emergencies on local pumping stations with charge back to area municipalities.

Comments:

General satisfaction.

Other Regions:

Regional responsibility.

11. SLUDGE DISPOSAL

Regional responsibility.

Comments:

- growing problem (Region of Halton cost about \$4,000,000 per year),
- large trucks moving sludge to farms (fertilizer) a problem on local roads with inadequate structural strength.

Other Regions:

- Regional responsibilities,
- similar problems to Region of Niagara.

IV STORM DRAINAGE

1,2,3, SUB-SYSTEM CONTROL, MAINS AND PUMPING STATIONS, 4 and 5 SYSTEM DESIGN, COLLECTION SYSTEM

- Jurisdiction not clearly defined except for Conservation Authorities,
- Region considers that Regional responsibility is limited to regional road right of way only,
- Region maintains local pumping stations with charge back to area municipalities.

Comments:

- Cost of storm facilities on regional roads is split between Region and area municipalities on the

- basis of flows from regional right of way and adjoining lands. At times, area municipalities have problems of meeting their costs,
- better budget coordination between Region and area municipalities needed,
 - umbrella authority (Region) over run-off areas desirable,
 - some problems between area municipalities along common water courses (up-stream - down-stream),
 - Region has authority over water courses but it apparently does not exercise it.
 - clearer definition of jurisdiction and cost sharing needed,
 - ownership of "joint" storm sewers should be defined.

Other Regions:

Regions responsible for cost of drainage of regional road right of way only.

Regions of Halton and Peel assume full responsibilities for all flows which existed prior to commencement of reconstruction or new construction of roads.

Opinions:

- better definition of responsibilities and cost sharing needed,
- central control of water courses needed.

6. LOT GRADING

Area municipality responsibility.

Comments:

No comments.

Other Regions:

As in Region of Niagara.

7. PLANNING AND RESEARCH (SURFACE POLLUTION)

Does not appear to be any clear responsibility.

V WASTE MANAGEMENT

Preamble

The Region is not involved in "waste disposal" except for one study with a recommendation for "club" (combining two or more municipalities into one disposal unit) arrangement. The following deals with "waste disposal" in total rather than dealing with specific items.

Current Responsibility:

Area municipalities,

Ministry of Environment responsible for hazardous waste.

Comments:

- landfill sites should remain area municipal responsibility,
- disposal plants and recycling should be regional responsibility for waste disposal,
- Region to be responsible for landfill sites, disposal plants, recycling, hazardous waste, planning, research and emergencies,
- area municipalities to be responsible for collection system.

Other Regions:

- Region responsible for landfill sites, disposal plants, planning, research and emergencies,
- Split jurisdiction over recycling (Durham - private collection),
- Ministry of Environment responsible for hazardous waste,
- Local municipalities responsible for collection system.

Opinions:

- vary from Region assuming 100% responsibility to no regional involvement,
- "transfer stations" assume increasing importance - should be regional responsibility,
- too much responsibility, too little authority,
- emerging as most important and difficult regional activity.

VI EMERGENCY PLANNING

Split jurisdiction between Province, Region and area municipalities.

Comments:

- Region should assume lead role of coordinating, planning and training of response teams.-

Other Regions:

- Regional, local and joint response levels,
- some regions have more formal response capability with trained crews operating on 24 hour response basis.

VII MAPPING, DATA BASES

Arranged as required.

Comments:

- needed,
- most appropriate for Region to develop and coordinate,
- not needed.

Other Regions:

Peel - area municipalities in the process of developing with Region's participation.
Durham, Halton - no activity.

Summary

Based on the fact finding in a split jurisdiction over a functions, which is the case for most of the public works services in Niagara, one expects a degree of overlap and duplication. No serious duplication of service has been identified.

The summary of the interviews and documentation suggest that the "perceived duplication" noted in the terms of reference is just that, a perception and not an actual duplication.

The pressure points identified are at the margin and include the following:

Transportation:

- Sidewalks - public has problem determining where responsibility rests.-
- Landscaping - the Region has a standard approved service level which does not allow for variation between urban and rural. There is a conflict in the major urban areas who want a higher level of service. (For example: grass cutting more than three times a season prescribed)
- Maintenance - standard level of service by Region causes same dissatisfaction where urban area desires different higher level of service. (Eg. snow removal)
- Parking - duplication seen with region having Control control and approval but area municipality responsible for enforcement.
- Transit - ironically the need for duplication; requirement of the Region to coordinate and plan inter-municipal region wide services.

Water:

- Towers - Regional Municipality owned but area municipality would like identification.

Sanitary Sewers: - problem is caused by lack of uniform segregated system in the region giving rise to service and cost occurrences when overflow or spillage occurs.

Storm Drainage: - with the exception of Conservation Authorities, it is not clear where overall responsibility rests. Region's position is that it is responsible for drainage of regional road right-of-way only.

Waste Management: - as in other regions a growing problem. Split in opinion as to whether there should be a continuation of the status quo with regard to responsibility or a change.

Emergency Measures: Again the duplications not serious, the Region has a capability and developed action plans and a degree of coordination; similarly the major urban municipalities especially Niagara Falls and St. Catharines have plans and a capability. The introduction of a region wide 911 system with responsibility resting with the Regional Police resolves one area wide question. Although some rural municipalities are apprehensive about costs.

The interviews identify a very clear policy and an effort on the part of the Region to identify duplication of services, and in cooperation with area municipalities, to attempt to eliminate these duplications.

Some significant tangible examples of cooperation are:

- emergencies and maintenance of region water and sanitary mains is done by area municipal crews,
- Region provides maintenance and emergency services for all area pumping stations, and
- Region provides maintenance and emergency services for most local traffic signals including coordination system of traffic signals.

Where problems occur in the Public Works functions they are not so much as a consequence of tangible duplication, but more due to a lack of a clear delineation of responsibility.

There are problems and tensions between the Regional

Municipality on the one hand and especially with the major urban municipalities, most notably the City of St. Catharines, and with the Hydro-Electric Commissions. The nature of these difficulties arises out of rather more intangible factors, not any less important because they are related to issues of attitude, the approach taken and undoubtedly in some circumstances, personality conflicts.

3. PUBLIC WORKS AND REGIONAL INTERGOVERNMENTAL RELATIONS

Within the Regional Municipality of Niagara, the Public Works Department plays a major role. This role has many different aspects. This chapter focuses, however, on two important characteristics, one internal and the other external to draw attention to how public works functions are delivered in Niagara.

Within the Departmental structure of the Regional Municipality, Public Works is a dominant actor and has been since the incorporation of the Region in 1969. By focusing on expenditure patterns over a decade a sense of both the need for and the ability of the Department to adjust to different priorities can be illustrated. In essence then, this can be utilized as an indicator, albeit indirect, of the capacity of the Department's senior management to accommodate change while maintaining ongoing operations. It demonstrates a corporate ethos of flexibility. The data suggests that flexibility must have been key in the shift of priorities from roads to the environment over this time period 1977-1986. Obviously the Department met the needs of the community as represented by expenditure commitments of the Regional Council.

The second part of this chapter sharply shifts the focus by discussing how the Department dealt with an area municipality's hydro-electric commission on two issues. What these issues or case studies illustrate is the reverse side of the Public Works Department's corporate approach. Instead of a flexible, responsive organization meeting new priorities; we are given a glimpse of an entrenched, slightly authoritarian operating style. This prism of an intergovernmental relations style, if it can be called that, assumes importance for this Study because it highlights what emerged from many of the interviews with elected and appointed officials at the area municipal level.

The attitude or tone adopted by the upper tier or Regional Department in terms of management style and dealings with area municipalities can impact on how questions over responsibility for services are resolved. If, as the preceeding chapter illustrates, actual duplication questions are at the margin; then it becomes intangibles such as the attitude or approach taken on any issue can serve to escalate tensions.

I Expenditures and Public Works

The Public Works Department of Regional Niagara has done an exemplary job over the past nineteen years of its existence. Its senior management team has been relatively intact throughout this period providing a consistent approach to the problems and demands. The overall record of the Department in terms of providing the mandated range of services at a level and standard acceptable to the community at large with due regard to the tests of efficiency and cost effectiveness are laudable. Table 1 showing Real Expenditure per Household by Function and Table 2 showing the percent of Total Expenditures per Household by Two Functions are taken from published studies of the Commission. The data covers the decade 1977 - 1986 and they sustain the subjective conclusion drawn above.

In 1977, the Region's expenditure on transportation, largely regional roads at 15.9 percent was very close to the total spent on the environment, a much broader band of services, at 18.6 percent. Five years later the shift in priorities becomes apparent. Transportation as a percentage per household was 11.7 percent in 1982 and at the end of the decade remained relatively constant at 10.6 percent. The total expenditure on the environment shows an increase of 1.6 percentage points 1977 to 1982 and 1.3 percentage points 1982 to 1986.

The dramatic shift, however, is not within the two functions over the decade but between them. For example while in 1977 there was a 2.7 percentage points spread between total expenditures on roads compared to the environment category; this had widened to 8.5 percentage points in 1982 only five years later; and to 10.9 percentage points at the end of the decade in 1986. In essence, priorities at the Regional level in terms of the provision of public works functions had shifted dramatically from transportation to the environment. Undoubtedly this shift is at least in part due to provincial initiatives and subsidies.

When compared with another Regionally mandated service, namely the range of regional social services, the data are again demonstrative. Public Works expenditures in 1977 were 4.3 percentage points more than social services and the relationship at the end of the decade had settled with only .1 percentage point more being spend on public works than on social services.

In conclusion then, while internal priorities, using expenditures as an index, shifted markedly within the Department from roads to the environment; the Region's overall priorities between public works and social services had only a relatively minor shift by comparison.

TABLE 1

NIAGARA REGION: PUBLIC WORKSREAL EXPENDITURE PER HOUSEHOLD BY FUNCTION

[Upper Tier only = U; sum of Lower Tier = SL]
 Constant Dollars and Percent of Total Expenditures

	1977				1982				1986			
	U		SL		U		SL		U		SL	
	\$	%	\$	%	\$	%	\$	%	\$	%	\$	%
Transportation												
- Roadways	119	15.9	226	24.2	88	11.7	176	20.6	88	10.6	181	20.3
- Transit	0	0.0	51	5.5	0	0.0	57	6.7	0	0	56	6.2
- Other	0	0.0	28	3.0	0	0.0	24	2.8	0	0	29	3.2
- Total	119	15.9	305	32.7	88	11.7	257	30.2	88	10.6	265	29.7
Environment												
- Sanitary/ Storm Sewer	79	10.5	63	6.8	93	12.5	63	7.5	108	13.0	62	7.0
- Water	61	8.1	61	6.5	58	7.7	53	6.2	71	8.5	57	6.3
- Garb.Coll./ Disposal	0	0.0	51	5.4	0	0.0	51	6.0	0	0.0	58	6.5
- Pollution Control	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	3	0.3
- Other	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.1
- Total	139	18.6	175	18.8	151	20.2	168	19.7	178	21.5	181	20.3

Source: John Todd

Data Set for Niagara Region and Area
 Municipalities 1977-1986
 Niagara Region Review Commission
 September, 1988

TABLE 2

NIAGARA REGION: PUBLIC WORKS & SOCIAL SERVICES

Percentage of Total Expenditures

[Upper Tier only, Sum of Lower Tiers]
1977 1982 1986

	1977 %		1982 %		1986 %	
	<u>Public</u> <u>Works</u>	<u>Social</u> <u>Services</u>	<u>Public</u> <u>Works</u>	<u>Social</u> <u>Services</u>	<u>Public</u> <u>Works</u>	<u>Social</u> <u>Services</u>
Upper Tier	34.5	30.2	31.9	29.5	32.1	32.0
Sum of Lower Tier	51.5		49.9		50.0	

Source: John Todd

Data Set for Niagara Region and Area
Municipalities 1977 - 1986
Niagara Region Review Commission
September, 1988

II The Region and the Hydro-Electric Commissions

The relationship between the Regional Public Works Department and the Hydro-Electric Commissions in Niagara can be used as illustrative of an important symbol of a general mood with regard to the prime mandate of this Study. This does not involve questions of perceived or real duplication of responsibility or function. What is highlighted and exemplified through what are in essence two case studies, is an illustration of how attitudes or approaches taken or struck especially by governments, become entrenched and permeate interjurisdictional relations.

The two case studies for want of a better descriptive phrase, both involve interactions between the Region's Public Works Department and as it happens primarily the Welland Hydro-Electric Commission.

It is not the detail that is of importance, but rather what the cases or instances represent or symbolize, especially in terms of how these governmental bodies dealt with each other.

1983: Hydro Pole Relocation

The Rose City Plaza in Welland required the relocation of hydro pole(s) to accommodate a new entrance in 1983. Roadworks on regional roads abutting the Plaza were involved, and thus both the Region and Welland Hydro became actors. The policy of Welland Hydro is to recoup the total cost of hydro pole relocation from the property owner when it is as a result of the owner's instigation. The owner of the Plaza agreed to pay; this is not at issue. The correspondence over the relocation of the pole(s) between the Region and Commission revolves around an interpretation by the Region which would have it share 50% of the recouped costs of relocating a pole with the Commission. The Region essentially attempted to interpose its jurisdiction and interpretation of responsibility over that of the Commission. The resolution of this issue is not contained in documentation. It is not important here.

1986: Electric Ducts & Bridges

While specifically related to the Highway #406 - Woodlawn Road extension in Welland the next case eventually included as protagonists: the Regional Public Works Department, Welland Hydro-Electric Commission joined by other Hydro-Electric Commissions in Niagara, the General Counsel of Ontario Hydro, and solicitors for the Region and Ontario Ministry of Transportation. Stripped of detail, basically two new bridges were to be built spanning the Welland Canal and the Welland River. The Welland HEC, in conformity apparently with accepted Hydro practice in other municipalities, wished to include in the drawings/

specifications for the bridges being drawn up by the Ministry of Transportation, a provision for 8 1/2 inch ducts to carry high voltage electrical wires. If these were not included, it would necessitate parallel to the bridges the erection of overhead poles. The bridges were to be built and subsidized by the Ministry of Transportation and on completion jurisdiction transferred to the Region. The Ministry routinely inquired of the Region as to any design specifications, and had received the request of Welland HEC. The Regional Public Works Department unilaterally wrote the Ministry instructing it to delete specifications for ducts. The argument was initially framed over the design feature. Subsequently, the Region raised questions about whose liability would it be in the instance of personal injury or property damage resulting from any contact with the high voltage lines imbedded in the ducts. The Region's position being that the Commission should enter into an agreement to indemnify the Region for any possible future claim.

The exchange of letters between the solicitors somewhat narrowed the issues and interjected what would appear to be key jurisdictional issues. Welland HEC's stance supported by Ontario Hydro in essence was that the Commission through its existing legislation could have the ducts included and was not required to provide the Regional Municipality with any indemnity waiver or agreement. The Region disagrees with this interpretation of the Public Utilities Act. The Regional Municipality in a Report dated April 12, 1988 to the Public Works and Utilities Committee wants a position adopted whereby in future "utility construction on regional bridges" would require an agreement, including among other things, total indemnity to the Region from claims for personal injury or property damage. By 1988, not only was a regional municipality and an area hydro commission involved but two components of the Province: Ontario Hydro and the Ministry of Transportation. Prophetically perhaps a 1986 newspaper report suggested that the question finally would have to be resolved in the courts!

III Analysis of An Approach to Interjurisdictional Conflict Resolution

The mandate of this Study does not include attempts at resolving such interjurisdictional issues. The point is that, setting aside the particulars of these two examples and focusing on attitudes and the tone of correspondence, especially from the Region, provides a glimpse at a difficulty which well may be endemic rather than limited to these two cases. Other examples have been cited in this Study relating especially to maintenance of roads.

It is not at all uncommon for officials of different municipal jurisdictions to disagree strongly over issues. Usually, however, internal mechanisms exist which provide for

resolution of such disagreements before they become public. The two cases raised do not appear to have any features or points that distinguish them, make them unique or original, either within or without the region.

The Mayor of Welland, as well as other area Mayors in Niagara, is both a member of the Welland Hydro-Electric Commission and the Regional Council.

While the appointed officials may have some reason to interact at arms length, the elected officials, especially Mayors, do not have this opportunity. The possibility for liaison, co-ordination and conflict resolution should derive out of the Mayor's position on the Commission, and Council, but there is no evidence in the documentation at least of such a role being exercised here. The Region through its Public Works Department has taken a firm stand.

An internal Public Works memorandum outlining a number of points that the Director of Engineering should take up with the Chairman of this Commission contains a sentence which unwittingly, may well put the cases into their proper context:

We believe that our [Regional] dealings with the local hydro electric commissions could be enhanced if the "local interest" component can be minimized

This sentence might strike at the heart of the situation. If it does, then there is a fundamental misconception on the part of, at least the Region's Public Works Department, as to the role and place of a region vis a vis area municipalities' boards and commissions. The continued existence for local boards and commissions and indeed, (local) or area municipalities as functioning parts of the Ontario local government structure is to heighten, protect, and represent the local or particular interest. The role of the area wide government (region) exists to give voice to the broader interests and concerns. This was the basis for the establishment of regional municipalities in the late 1960 and early 1970 and the division of responsibility for functions between upper and lower tier; including the shared responsibility that exists in certain functions. The *raison d'etre* of the complex system of local government in this province is not one of superior (area wide/region) to inferior (area municipality, local board or commission) but to provide forums to represent the local and general interest; and more particularly to find a mechanism through the Region to balance these sometimes competing claims. Right is not only to be found on the side of the higher level of government. Equally, narrow local interests at times must be moderated/modified to accommodate the interests of the whole. There is no ironclad rule, however, which postulates that whenever local interests conflict with general interests; that the general must prevail. Indeed the

function of the Regional Council amongst other things, is to mediate such disputes. Unfortunately it would appear at least from these two, admittedly high profile cases, that Regional Council decision-making was overtaken by bureaucratic decision-making. There is no suggestion of any malfeasance whatever. What is demonstrated is a firm, some might say rigid stance adopted by Regional Public Works, reflected in the tone of correspondence between the two bodies. The net result especially in the ducts case is an escalation of an issue out of proportion to its seriousness.

If this attitude were isolated, it could and would be ignored. Unfortunately it is but a tangible example which is more visible of pressure points in the ongoing relationship of region and area municipalities in Niagara.

4. CRITERIA FOR THE ALLOCATION OF RESPONSIBILITIES

Are there any accepted set of criteria which can be used to arrive at conclusions about which level of government should have responsibility for any particular service? The generally accepted body of literature in the government and public administration fields offer material on this question. Most often it revolves around the allocation of responsibilities in a federal system between the central government and the provinces. There has been remarkably little of a comprehensive nature written in the local government area.

Almost forty years ago, however, a paper published in Britain*, developed a quite straight forward set of criteria. The framework is to determine whether a service which required local organization should be administered by the central government or municipality. The principles are subject to application, with some care to determine on a more or less objective basis whether a particular service should be the responsibility of the regional municipality or the area. The criteria are given below, but it must be acknowledged that they are framed with a bias, in Niagara's case possibly the bias to be compensated for is toward the area municipality.

1. ...whenever a public service requires local organization it should be accepted as a first broad principle that some form a local authority control of administration is desirable unless good reason can be shown to the contrary.
2. How far is the service capable of being successfully administered within the financial resources available to the local authority responsible for its administration and without undue dependence on central government for grants in aid?
3. ...wherever the service is linked and should be co-ordinated with existing locally administered service it is desirable to connect local services under the local authority unless strong reasons exist to the contrary.

* Lythgoe, J. "Principles which should Determine whether a Service Requiring Local Organization is best Administered by Central Government Department or by a Local Authority". Public Administration XXVII (Spring, 1949) p.3.

4. ...wherever it is possible to allow considerable diversity in the administration of a service it should be left to local authority administration.

Broader based attempts at developing a criteria have been used over time. For example, and closer to home, The Royal Commission on Metropolitan Toronto (Robarts Report, 1977) stated:

an appropriate balance of authority can best be achieved and maintained if responsibility for as many services as possible is assigned exclusively to one tier or another. This will reduce potential duplication and conflicts over jurisdiction.

More germane to the issue at hand, the Roberts Report then went on to define responsibilities according to a three fold typology: arterial/local; supervisory/subordinate and coordinating/ equalizing of which the first is of interest:

arterial/local or wholesale/retail - Metro deals with major facilities on the basis of an area wide program while the local municipalities deal with local facilities in response to local priorities.

Under this definition waste disposal was allocated to Metro with area municipality having responsibility for collection; Robarts recommended that responsibility for securing landfill sites should be moved from Metro to the Province. This was not accepted by Queen's Park.

In summary then, if a service is to be allocated to one level or another of municipal government within a two tier structure requires flexibility of approach, then it should be the responsibility of the lower tier or area municipality. Lythgoe's second criterion, financial self-sufficiency of the service is the most complicated of the four. To make an adequate determination in terms of public works functions would require detail not only on transfer payments but on the extent to which, and the level at which user charges are utilized. If the service examined has links to existing services or requires diversity in administrative approaches it should be a lower tier responsibility. The converse then becomes the rule for the regional municipality assuming responsibility; if uniformity is a prerequisite and unless there is scope for ingenuity and flexibility it should rest with the upper tier or region.

The Robarts arterial/local test is consistent with the requirement that area wide approaches should be the responsibility of the level of municipal government which has a wider than local constituency.

5. CONCLUSIONS AND RECOMMENDATIONS

The conclusions and recommendations contained in this section are a consequence of the information gathered during the extensive round of interviews with elected and appointed officials, the documentation reviewed, and the analysis of this information. Combined with the distillation of this hard data goes the mix of experience gained over the years from dealing with similar problem situations in other jurisdictions.

As a consequence of the analysis of the inventory contained in Chapter 2, there are two conclusions of this Study:

- I There is no serious problem resulting from the either duplication, where it does exist, in the provision of public works functions in Niagara; or from the existence of the split jurisdiction/shared responsibilities that arises from the structure of municipal government in Niagara.
- II The problems that do exist as a consequence of shared responsibilities are effectively at the margin. Some of them, nevertheless are important and call for readjustment and fine-tuning of a municipal system that both works well, and is cost effective in the provision of services to the constituents of the region.

The most serious problem rests with the approach adopted by the Region's Public Works Department where external relations are marked by a rigidity in approach, lack of flexibility and an air of unwillingness to accommodate the views of other professionals in area municipalities or agencies.

The recommendations in this section are of two basic types. First, are recommendations which are subject specific and relate directly to each of the seven main functional areas of public works reviewed. The second set of recommendations is much broader and is framed with the hope and expectation that the mechanism suggested will ease the internal intergovernmental aggravation that exists. There are no heroes or villains. That is not the objective of this Study. The goal is to offer a set of recommendations that will assist in making a good system for the provision of public works services even better in the Niagara Region.

Major shifts of responsibility for public works functions with one exception are not recommended in this Study. There is a wider horizon to be considered. Both the Regional Municipality and the area municipalities singly and collectively must be alert to shifts in either level or nature of transfer payments or mandated services emanating

from the Province of Ontario. Lines of communication between Queen's Park and the Region must be kept open, with informal as well as formal contact encouraged. All municipalities in Niagara must be forceful in presenting their point of view.

Undoubtedly, for many residents in Niagara the question of snow ploughs on roads represents a visible and prima facie case of duplication at best; and waste at worst. In fact ploughs illustrate all too tangibly the dilemma of a two tier municipal structure such as Niagara with a sharing of responsibilities for public works functions.

In theory, the division of responsibilities is clear. The area municipality ploughs those roads designated as local and its responsibility. The Region likewise ploughs those roads designated as regional; and the Ministry of Transportation ploughs provincial highways. What happens is, for example, a regional plough to get to a regional road may have to cross or travel along, either a local or provincial road with its plough up to get to the regional road; or visa versa. Shortly thereafter, the area municipal plough crosses the same regional road which has been ploughed by the region with its plough up to get to the area municipal road for which it has responsibility.

There are cases where either jurisdiction may plough the others road. Short of an arrangement, however, whereby either the area municipality or region had total responsibility for all road ploughing for example, this situation will continue and is unavoidable.

In a region as large and as diverse, urban and rural as Niagara the complete designation of all roads is not feasible. The best that can be done is to have those roads, where clearly it is easier to have, say the area municipality handle ploughing, that such an arrangement be negotiated including questions of cross subsidization. Probably this is most likely to occur on regional roads through the major urban municipalities. Ironically enough most of instances cited have been in the rural areas.

The recommendations which follow deal with each of the seven major public works functions required to be examined by the terms of reference of this Study.

A. Transportation

The Regional role in transportation is currently limited to roads. The Regional road network reflects the Ministry of Transportation guidelines. Region policy is to provide equal service throughout the Region. This results in critical remarks in rural areas of "excessive service levels" especially in

winter; and correspondingly, in urban areas criticism of "inadequate service level" in the summer (grass cutting).

When questioned about future role of the Region in "Transportation" the opinions can be summed up by setting forth three alternatives:

1. Reduce or eliminate the Regional role in providing a "second tier" road network. (ie. Province, Regional and Local are the three tiered network).
2. Maintain current arrangements with some adjustment of road network and the introduction of a classification.
3. Expand Regional mandate into "Transportation" by allowing the Region to carry out comprehensive transportation planning of all modes, including classification of road system, goods flow, accessibility, coordination and representation of Regional interests at Federal, Provincial and local levels.

The first would effectively eliminate the Region from any role in providing a transportation service to the Region. The Ministry of Transportation considers it "desirable" that a second tier road system between the provincial road network and local road network exist.

The second alternative has served the Region since its establishment in 1969. The Region has done excellent work in improving and maintaining the system using effectively modern management tools. Some adjustment is required now. Most of those interviewed agree that the adjustment of the Region's role requires more comprehensive planning, a classification of road system and adjustment of the road network to reflect function and accessibility.

The last alternative is basically an expansion of the Regional role in Alternative 2 to a "comprehensive Transportation role" for the Region.

Recommendations

1. The Regional role in providing the "secondary tier" of road network should not be reduced. It should, however, be adjusted, utilizing planning techniques defining accessibility, road function and classification. The likely result is that some roads that have no "regional function" will be transferred to area municipalities and others

will assume "regional status". In essence a deregionalization of some roads in the Region will result, in these cases the Committee mechanism recommended below will determine question of costs and who bears what portion, if any.

2. This determination must be done through consultation with area municipalities and is not a decision to be unilaterally taken. A consideration might be given to an expanded Regional mandate in the future to provide "comprehensive transportation service" through planning, "coordination and cooperation with local, provincial and federal governments and agencies" and through "implementation of services and facilities necessary to provide a comprehensive transportation system of carrying people and goods by all modes".
3. In consultation with affected area municipalities a differentiated system of service levels urban and rural for maintenance: grass cutting, snow removal, be adopted.

B. Water

The current arrangement provides both a good service level and meets with general acceptance from area municipalities and the Ministry of Environment.

The time has come for some study and discussions between Region and area municipalities to more sharply define where Regional jurisdiction should end and local jurisdiction begin.

The backlog of water systems needed to be developed has been reduced to manageable proportion. Some flexibility in addressing local needs must be provided in the budget through, perhaps, contingency funds for special needs, and to allow quick response to local problems.

Recommendation

1. The existing split jurisdiction for the provision of water be retained.
2. The Region, after discussion with area municipalities, might wish to redefine where regional jurisdiction may be altered.
3. Region to consider budgeting of capital expenditures for contingencies.

C. Sanitary Sewers

The current split in jurisdiction operates satisfactorily even with a number of existing and potential conflicts. These conflicts center on the following: - combined sewers (storm and sanitary); and connection of property subdrains and roof drains to sanitary sewers.

It is simply not practical to provide storage and treatment facilities to include storm water from combined sewers and/or property drains. The flows now which are in excess of treatment plant capacity, by-pass treatment plants and raw sewage is discharged to the lakes and rivers. This is increasingly unacceptable. Separation of sanitary and storm sewers, however, is very expensive. Also it is costly to disconnect property drains from sanitary sewers and connect them to the storm sewers. The process creates disruption of households and problems for property owners and businesses. Whole streets and neighborhoods are affected.

Currently, it is the area municipality's responsibility to establish separate discharge into storm and sanitary sewer systems. On the other hand the Region is responsible for raw sewage discharging into lakes and rivers. Who should pay - Region, local municipality, Province or property owners is not the prominent question. This problem must be faced, and the issue is when and over what time period.

There is also a need to redefine jurisdiction of the Region and responsibilities of area municipalities.

There is need for study and discussions with participation of the Ministry of Environment, Region and area municipalities to redefine the Region and area municipalities responsibilities and to establish a joint approach to dealing with combined sewage and storm flows.

Other Regions have full responsibility for collection, treatment and disposal of sewage. The need for full control by the Regional Municipality of Niagara is not a priority.

Recommendations

1. Retain existing split jurisdiction system.
2. The Region, after discussion with area municipalities, might wish to redefine its jurisdiction over sewer mains.

3. Ministry of Environment, the Regional Municipality and area municipalities begin to study and establish a joint approach to dealing with combined sewers and property drains connections to sanitary sewers including how it would be financed.
4. The Region consider budgeting of capital expenditures for contingencies.

D. Storm Drainage

All Regional Municipalities of Ontario, including Niagara, have similar storm drainage policies, namely that the Region is responsible for storm drainage of "regional roads right of way" only. Interpretation of this policy varies significantly from Region to Region. To illustrate the point: reconstruction of a regional road includes the installation of storm sewers. Let us presume that Regional road right of way contributes to the flow by 20 per cent and the adjoining land existing flow contributes 80 per cent. Some Regions consider that all existing flows are their responsibility and pay 100% of the cost of storm sewer. In other Regions, area municipalities are billed for 80% of the cost of storm sewer.

All Regional Municipalities have jurisdiction over water courses and run-off areas, but none seems to exercise authority over storm drainage.

Recommendations

As storm drainage is controlled in a piece meal manner and to avoid difficult and expensive measures which result from accumulation of piece meal solutions over a period of time, it is recommended that:

1. The Regional Municipality, Ministries of Natural Resources, Environment and the area municipalities jointly address the questions of jurisdiction, exercise of authority and control of water courses and run-off areas.
2. The Regional Municipality, in consultation with the area municipalities, review current policies on storm drainage especially on Regional right of ways.

E. Waste Management

In the Regional Municipality of Niagara the area municipalities are responsible for waste management.

The existing arrangement exacerbates two main problems:

- a. There are increasingly complicated technical requirements in the handling of waste disposal; and
- b. The ability to plan well in advance of needs, to guide the plan(s) through approval process and resources to implement adequate disposal.

Through a Regional initiative a study of waste disposal has been undertaken which recommended "CLUB" ie. two or more area municipalities combining to provide joint disposal sites arrangement.

The CLUB recommendation offers a significant improvement over the existing system by pooling resources of a number of area municipalities into one system. There are doubts that the administration of the CLUBS can function effectively over the long term.

The other Regional Municipalities have full responsibility for waste management with area municipalities responsible for collection. The Ministry of Environment policy moreover is to encourage "Regional" responsibility for waste management.

Within the area municipalities opinions fluctuate from "local" responsibility to "regional" jurisdiction. Most argue that collection should be an area municipality responsibility. Most area municipalities consider that any disposal or recycling plants should be the responsibility of the regional municipality.

Chapter 4 very briefly sets forth some accepted criteria for the allocation of responsibility between governments. After a very careful review of the evidence in the Niagara Region as collected by the Study and the criteria, this is one public works function where substantive changes are required. The requirement in waste management is for uniformity of approach, as a consequence of the enormous costs for a pooling of local financial resources combined with Provincial assistance, a continuity and consistent administrative approach. In the short term, the CLUB mechanism should continue, this is not a service where it can effectively be put on hold. While, in general, arguments about uniformity of approach across the Province are not convincing, this is one service where it is becoming increasingly apparent that any effective program to meet the problem needs

to be, at the very least, at the Regional Municipal level. The Robarts Report recommendation that in Metro the Province ought to assume responsibility is becoming prophetic. All across the Golden Horseshoe, in Regional Municipality after Regional Municipality, waste management especially landfill sites is the major issue.

Recommendation

1. The Regional Municipality of Niagara assume responsibility for all landfill sites and disposal facilities, including any transfer stations. CLUB arrangements to be phased out as soon as practicable.
2. Collection be a responsibility of the area municipality.

F. Emergency Planning

The current arrangements meet with general approval.

Recommendation

The Regional Municipality of Niagara continue to perform a coordinating role with respect to emergency planning and as well, in concert with area municipalities develop and establish a training capability. The region's emergency planning office should be the central depository for information, which should be distributed throughout Niagara from this office.

G. Mapping and Data Bases

Computerized mapping and data bases are increasing in importance as management tools in municipalities. The Regional Municipality of Niagara already uses a computerized system in traffic control and coordination of both local and regional traffic signals.

Recommendations

The Regional Municipality of Niagara coordinate development of data bases and mapping for the whole Region and should become central depository of data.

The following recommendations are intended to span the whole range of public works functions covered by the terms of reference. Chapter 3 was devoted almost exclusively to a discussion of management style and approach, and the particular cases serve to highlight a feeling articulated by many area municipalities in the Region. Quite naturally the

pressure points are sharpest in those urban municipalities in the region who have in their own public works departments comparable, and in some areas maybe even more sophisticated programs and policies than does the Region.

Within Durham, Halton and Peel Regions and some area municipalities and the Region of Niagara consider that clear, fully integrated, jurisdiction over each component of regional activity is important in effective administration and in terms of public identity. This is reflected in the Regions of Durham, Halton and Peel with full jurisdiction over delivery of water and collection and disposal of sewage. These Regions also exercise responsibility for waste management except for local collection.

In the Region of Niagara "split jurisdiction" over water distribution and sewage collection systems does not present problems. On regional roads there are some problems with sidewalks, lighting and storm drainage which the recommendations above are designed to meet.

It should be clear that the conclusion of this Study is that some tension is unavoidable between different levels of government and is healthy. Not all services are capable of being neatly and cleanly divided as to responsibility. If a two tier system of government at the municipal level is considered a prerequisite, and clearly the terms of reference for the Niagara Region Review Commission as a whole support this notion, then the task is to make the system of split jurisdiction work better.

It is not the jurisdiction which then becomes important but the effective and efficient delivery of services to all ratepayers in the Region.

The Regional Municipality of Niagara should systematically evaluate all its operations in consultation with the area municipalities. Jointly, a forum should exist where adjustments in jurisdiction, regulation, organization and operation of all public works functions can be considered. This is a two stage process, administrative and political. The Council of the Regional Municipality of Niagara offers an established forum for the resolution of the matter, containing as it does local representation directly because of the presence on it of the Mayor of each area municipality. Further, the existence of the Region's standing committee on Public Works and Utilities offers the opportunity for committee review of recommendations. Politically the forum and procedure are in place.

Administratively there is no such comparable forum. The considerations to be dealt with, for example the possible "deregionalization" of roads (see A. Transportation, Recommendation 1) and must not be dealt with unilaterally.

Finally, it is deemed essential that a mechanism be established at the administrative or technical level with Niagara both to formalize and to provide a forum to resolve these interjurisdictional difficulties.

Therefore it is Recommended that:

1. A joint Regional Municipality of Niagara and Area Municipality Consultative Committee be established with representatives from the Region's Public Works Department and from each area municipality works department. If specific issues arise which relate to boards or commissions in the region eg. Niagara Parkway Commission, Hydro-Electric Commission etc., then representatives from these bodies be added to the Committee for the determination of the specific issues.
2. This Joint Municipal Technical Consultative Committee for the Niagara Region meet at least twice a year, more frequently if required. The Joint Consultative Committee should so structure itself that minutes are taken and circulated.
3. The mandate of the Joint Municipal Technical Consultative Committee for the Niagara Region shall be to deal on an intermunicipal basis with issues arising out of the division of the public works functions in Niagara.

The role of the Consultative Committee is to hopefully arrive at consensus on positions; if this is not possible then the Regional Public Works and Utilities Committee will have the benefit of an articulated position from the Technical/Administrative officials before it.

The intent is that through this mechanisms an opportunity will be created for open discussion and consideration of matters of joint concern can be added. Moreover, the high standard of service level delivery in the public works area can continue in the Niagara Region.

Appendix A

Terms of Reference (Revised)

Research Study #5

PUBLIC WORKS

TERMS OF REFERENCE (Revised)

1. NATURE OF PROBLEM

There is considerable concern and dissatisfaction, at least in the minds of many citizens and a number of local government officials, over the perceived duplication in the provision of public works in the Niagara Region. The concern appears to derive from the split jurisdiction (that is, local and regional governments) involved in the provision of these services: for example, certain roads are regional while others are local. Furthermore, within urban areas where the road allowances are regional, many services including sidewalks, street lighting and sanitary and water services are the responsibility of the area municipalities. In addition, the region is responsible for trunk water and sewage lines, sewage treatment and pollution control plants while local governments are responsible for water distribution and sewage collection.

2. PURPOSE OF STUDY

The purpose of this study is to:

- i) Examine and describe the extent to which the duplication in the provision of public works services actually exists.
- ii) Make recommendations for changes that would lead to improved efficiency and effectiveness in the delivery of public works services. This might involve recommendations ranging from a continuation of split responsibility to recommendation calling for the provision of one or more of these services by one level of government (region or local) only.

3. SCOPE OF STUDY

- i) The researcher must document the existing division of responsibilities for the following services:
 - roads
 - water

- sanitary sewage
 - storm drainage
 - waste management
 - emergency planning
- ii) The researcher should conduct interviews in other two tier governments to determine how the responsibility for these services is divided in those jurisdictions.
 - iii) The researcher should recommend which level of government should be responsible for the provision of which services. As necessary, this should include suggested methods of consultation and cooperation between the various governmental and non-governmental bodies concerned with public works.

4. WORK PLAN

- i) Meet with staff of Niagara Region Review Commission to discuss detail of work plan and contents of final report.
- ii) Do background research to determine how system has developed in Niagara and elsewhere.
- iii) The final list of people to be interviewed will be determined by consultation between the contractor and the Commission staff, but the following officials should be interviewed:

Chairman of Regional Public Works and Utilities Committee (1 meeting)

Chairpersons of comparable committees in some area municipalities (5)

Chief Administrative Officer of Region (1)

Regional engineer and senior officials (5)

Engineers and road superintendents in all twelve area municipalities (12)

Chief administrative officers of several area municipal hydro-electric commissions (1)

Regional staff of provincial Ministries of Transportation and Environment (4)

Total of twenty-nine interviews

Appendix B

List of Interviews

Interviews

<u>Jurisdiction</u>	<u>Name & Position</u>	<u>Date</u>
Province of Ontario:		
Ministry of Environment	B.I. Boyko, Director, West Central Region	1/9/88
	B. Hansler, Abatement Manager, West Central Region	1/9/88
Ministry of Transportation	E. Ellard, Area Manager, Planning & Design, Central Region	31/8/88
	I.M. Nethercot, Manager, Municipal Roads,	19/9/88
	F. Norman, Manager, Toronto Area Co-Orinating,	19/9/88
	B.D. Riddell, Director, Central Region,	2/9/88
	A. Zembal, Manager, Transportation Corridor,	19/9/88
Other Regions	W.A. Twelvetreets, Commissioner of Public Works, Regional Municipality of Durham,	1/9/88
	R.W.J. Moore, Director of Public Works, Regional Municipality of Halton,	30/8/88
	D.J.L.Markle, Commissioner of Public Works, Regional Municipality of Peel,	31/8/88
	S. Pettit, Chairman, Regional Public Works Committee,	7/9/88
	M. Boggs, Chief Administartive Officer,	11/8/88
Regional Niagara	C. Eidt, Director of Engineering,	2/9/88

<u>Jurisdiction</u>	<u>Name & Position</u>	<u>Date</u>
	G. Bagshaw, Head, Water & Sewer,	2/9/88
	D. Cook, Environment,	9/9/88
	C. Foster, Traffic Engineer,	2/9/88
	M. Holenski, Deputy Director,	6/9/88
	J. Kirby, Director, Emergency Measures Organization,	9/9/88
	E. Simonen, Head, Environment Section,	6/9/88
	K. Yu, Head, Engineering Services,	6/9/88
Area Municipalities	L. Oates, Director of Municipal Works, City of Niagara Falls,	16/9/88
	B. Middlestead, Chairman, Public Works Committee, City of Port Colborne,	7/9/88
	H. Woodgate, City Engineer, City of Port Colborne,	19/9/88
	J.L.McCaffery Mayor, City of St. Catharines,	8/9/88
	J.Kernahan, City Engineer, City of St. Catharines,	6/9/88
	W. Longo, Mayor, City of Thorold,	13/9/88
	F. Lewis, City Engineer, City of Thorold,	6/9/88
	D.Landells, City Engineer, City of Welland,	19/9/88
	M. Lloyd, Director of Engineering, Town of Fort Erie,	20/9/88
	R.J. Leroux, Director of Public Works, Town of Grimsby,	16/9/88

<u>Jurisdiction</u>	<u>Name & Position</u>	<u>Date</u>
	W. Watson, Director of Public Works, Town of Lincoln,	19/9/88
	N. Aragona, Assistant Works Superintendent, Town of Niagara-On-the-Lake,	20/9/88
	N. Henry, Roads Superintendent, Township of Wainfleet,	20/9/88
	E. Griffin, Roads Superintendent, Township of West Lincoln,	9/9/88
	B. McLaughlin, Township Engineer, Township of West Lincoln,	9/9/88
Commissions	A. Luciano, General Manager & Secretary Treasurer, Niagara Falls Hydro Electric Commission,	13/9/88
	G. Sorensen, General Manager, Port Colborne Hydro-Electric Commission,	13/9/88
	D. Lines, Manager & Secretary, St. Catharines Hydro-Electric Commission,	13/9/88
	R. Slavickas General Manager & Secretary, Welland Hydro-Electric Commission,	13/9/88
	P.J. DeFoe, General Manager & Secretary- Treasurer, Thorold Hydro Electric Commission,	13/9/88
	D. Percy General Manager & Secretary, Grimsby Hydro-Electric Commission,	13/9/88
	W. Farrell, Executive Vice-President, Chief Operating Officer, Canadian Niagara Power Co. Ltd. Distributes in Town of Fort Erie.	13/9/88

Appendix C

Interview Form - Appointed Officials

INTERVIEW FORM
NIAGARA REGION REVIEW STUDY
RESEARCH STUDY #5
PUBLIC WORKS

ITEM	DESCRIPTION	JURISDICTION EXIST. PROP.	COMMENTS
------	-------------	------------------------------	----------

I TRANSPORTATION

A ROADS

- 1 Sidewalks
- 2 Lighting
- 3 Traffic Signals
- 4 Pavement Markings
- 5 Signing - Traffic
- 6 Signing - Directional
- 7 Signing - Information
- 8 Commercial Signing
- 9 Landscaping
- 10 Access Control
 - a. Regional
 - b. Local
- 11 Planning
- 12 Traffic Engineering
 - a. Parking Control
 - b. Traffic Signal
 Coordination
 - c.
 - d.
- 13 Classification
- 14 Parade Permits
 - a. Regional
 - b. Local

B TRANSIT

- 1 Local
- 2 Regional
- 3 Coordination with
 Province
- 4 Coordination with
 other "modes"
- 5 Taxis
- 6 Special Service

INTERVIEW FORM

NIAGARA REGION REVIEW STUDY

ITEM	DESCRIPTION	JURISDICTION EXIST. PROP.	COMMENTS
C	<u>COMMERCIAL</u> <u>(FREIGHT)</u>		
1	Regulations & Licences		
2	Design Standards		
	a. Roads		
	b. Loading (unloading)		
	c. Circulation		
	d. Accessibility (efficiency)		
D	<u>REGIONAL</u> <u>ACCESSIBILITY</u>		
1	Responsibility		
2	Method of Evaluation		
3	Analysis (standards)		
4	Modes Coordination		
	a. Pedestrian		
	b. Bicycle		
	c. car		
	d. transit		
	- local		
	- regional		
	- provincial		
	e. Trans-border		
	f. National		
	- international		
II	<u>WATER</u>		
1	Supply & Treatment		
2	Reservoirs, Water Towers		
3	Mains		
4	Local Mains		
5	House Connections		
6	Commercial Connections		
7	Payment		
	a. Region		
	b. Local		

INTERVIEW FORM

NIAGARA REGION REVIEW STUDY

ITEM	DESCRIPTION	JURISDICTION EXIST. PROP.	COMMENTS
------	-------------	------------------------------	----------

- | | | | |
|----|------------------------|--|--|
| 8 | Standards | | |
| 9 | Emergencies | | |
| 10 | Planning &
Research | | |

III SANITARY SEWERS

- | | | | |
|---|---------------------------------------|--|--|
| 1 | Treatment facilities
and discharge | | |
| 2 | Mains | | |
| 3 | Local Mains | | |
| 4 | House Connections | | |
| 5 | Commercial
Connections | | |
| 6 | Payment | | |
| | a. Region | | |
| | b. Local | | |
| 7 | Standards | | |
| 8 | Emergencies | | |
| 9 | Planning &
Research | | |

IV STORM DRAINAGE

- | | | | |
|---|---|--|--|
| 1 | Drainage | | |
| | Areas Control | | |
| 2 | Sub-system | | |
| | Areas Control | | |
| 3 | Mains & Pumping
Stations | | |
| 4 | System Design
(capacities,
retention) | | |
| 5 | Collection System | | |
| 6 | Lot Grading | | |
| 7 | Planning & Research
(pollution) | | |

V WASTE MANAGEMENT

- | | | | |
|---|-----------------|--|--|
| 1 | Landfill Sites | | |
| 2 | Disposal Plants | | |
| 3 | Recycling | | |
| 4 | Hazardous Waste | | |

INTERVIEW FORM

NIAGARA REGION REVIEW STUDY

ITEM	DESCRIPTION	<u>JURISDICTION</u> <u>EXIST. PROP.</u>	COMMENTS
------	-------------	--	----------

- | | | | |
|---|----------------------------|--|--|
| 5 | Residential
Collection | | |
| | a. Single family | | |
| | - municipal | | |
| | - contract | | |
| | b. Multi-family | | |
| | - municipal | | |
| | - contract | | |
| | - private | | |
| 6 | Commercial &
Industrial | | |
| | a. Small | | |
| | - municipal | | |
| | - contract | | |
| | - private | | |
| | b. Large | | |
| | - municipal | | |
| | - contract | | |
| | - private | | |
| 7 | Planning & Research | | |
| 8 | Emergencies | | |

VI EMERGENCY
PLANNING

VII MAPPING
- DATA BASIS



3 1761 11547187 2